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CHARLES MAYNARD WOODWARD was graduated with the degree of D.D.S. from the University of Southern California College of Dentistry in 1918. Doctor Woodward is a past president of the Pasadena Dental Society, U. S. C. D. Alumni Association, and the Southern California Society of Exodontists and Oral Surgeons. He has previously contributed to this magazine as well as to other journals in the dental field. THE SINGLE NEEDLE TECHNIQUE presented in this issue should be a welcome simplification in anesthesia for oral surgery.

C. FRANK TUMA, D.D.S., (Western Reserve University School of Dentistry, 1928) presents in this issue another of his many useful suggestions published with us in the past

About Our CONTRIBUTORS

from time to time since 1932. His last publication here was in November, 1938 and described an OIL BATH FOR THERMOPLASTIC DENTURES. This time Doctor Tuma suggests a method of DEFLASKING ACRYLIC DENTURES.

MORRIS EIGEN, D.D.S., (Georgetown University School of Dentistry, 1934) likes operative dentistry and this article in this issue is the fifth of his practical contributions to THE DIGEST—the last (FULL CROWN PATTERNS:

DIRECT METHOD) having appeared in April, 1939.

JAMES L. BRADLEY, D.D.S. (Northwestern University Dental School) retired from his practice in Springfield, Illinois, after having received his Master's degree at Northwestern in 1940, to accept a commission in the Dental Corps of the United States Navy. Doctor Bradley had formerly been a cavalry officer in the United States Army.

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The Single Needle Technique

C. M. WOODWARD, D.D.S., PASADENA, CALIFORNIA

THERE ARE ONLY two locations where the solution needs to be placed deeper than one-fourth inch below the surface of the mucosa for any of the dental or oral surgery operations that are usually performed under local anesthesia. One of these deeper locations is around the mandibular foramen and the other is the area covering the alveolar foramina of the maxillary tuberosity. Under ordinary circumstances these two deeper areas can be reached at about three-fourths inch beneath the surface of the mucous membrane; however, in order to give latitude for exceptional cases and to allow for better vision a needle twice that length is desirable.

The objection can and will be raised that a 1½ inch needle might bend or break. Such an objection was valid before the day of the present high grade stainless steel needles. These needles have a fine temper and in the 25-gauge, there is sufficient strength to prevent their being bent by any stress to which we might subject them in making the deep oral injections. There is hardly any danger of breakage of the better grade stainless steel needles now available.

Contrary to the belief of some, the 25-gauge needle is not more painful for infiltration injections than a smaller needle. The cutting point of a properly sharpened 25-gauge needle is actually no larger than that of an equally well sharpened needle of 27-gauge (Fig. 1). Within limits, the secret of painless insertion of the needle lies not in the fineness of the gauge but in the sharpness of the point. Many operators use a 21-gauge needle with excellent results.

The single needle technique conserves the anesthetic solution. With certain types of cartridge, needles cannot be changed, making it necessary to insert a new cartridge every time a different needle is put into the syringe even if the first cartridge has been only partly used. This waste of solution is overcome when only one needle is used.

DIGEST

A suggestion is made for the use of only one needle (25 gauge) in local anesthesia for dental or oral surgery operations.

Injection zones and anesthetic bands are delineated as guides to be followed in discussing the technique for shallow injections and for deep injections.

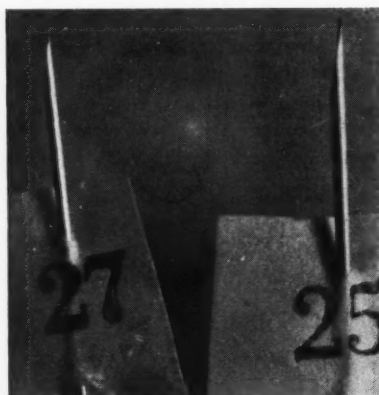


Fig. 1—Properly sharpened 27-gauge and 25-gauge needles enlarged to show that the point of the thicker needle is the same as the point of the smaller.

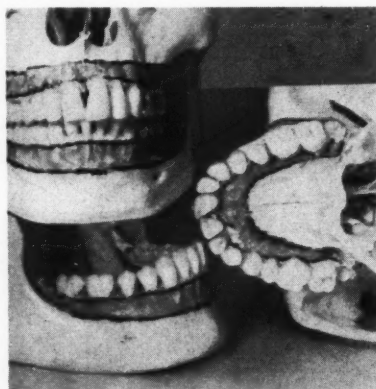


Fig. 2—Different views of the anesthesia bands with their injection borders.

The technique suggested here is appreciated by the nervous patient because he does not have to wait and watch apprehensively while needles or syringes are being changed. Frequently a deep injection and two or three shallow ones can be made without removing the needle from the mouth.

All the involved terminology, such as "mucous fold," "infiltration," "conduction," should be forgotten. It should be borne in mind that in the induction of local anesthesia all that is required is to place a sufficient quantity of anesthetic solution in places where it will anesthetize the nerves that supply the area about to be operated on, and that nearly all these areas require less than one-fourth inch penetration of the needle beneath the surface of the mucous membrane. Only two of the areas require that the needle be inserted deeply. Dentists who are confident when making the shallow infiltration injections frequently are unnecessarily fearful when inserting the needle into the deeper tissues. Pushing a sterile needle 2 inches into the soft tissues of the body will do the patient no more harm than inserting it one-fourth inch. It is true that hematomas can be caused by puncture of deep seated blood vessels and sudden edemas can develop from puncture and injection into the lymphatic system. There is slight danger of such accidents, however, if the injections are restricted to the two deep areas mentioned; namely, the mandibular foramen and the area covering the alveolar foramina of the maxillary tuberosity.

In describing how the deep injections are made, writers have stressed the importance of some point in the soft tissue as a landmark for insertion of the needle and in most techniques for conduction anesthesia, certain teeth are also used as landmarks. I should like emphatically to point out that both of these methods of approach are confusing and unreliable. Slight reliance can be placed on a point in the

soft tissues as a guide to injection because the relationship between any such point and the area to be injected varies widely according to the relative size, texture, and position of the muscles and bony structure. The teeth, having no uniformity of position and often being missing entirely, obviously cannot be relied on as general landmarks.

A frequent mistake in local anesthetic techniques for oral surgery is to anesthetize too small an area. Failure to extend the anesthetized area well beyond the immediate site of operation can bring about difficulties. Too close surgical approach to the outer edge of the anesthetized field through cutting or pressure will often cause some pain; whereas confining the operation to the small area anesthetized may not give a thorough result. Furthermore, a too restricted anesthetic field will often fail to take care of nerve extension through the anastomoses that are so frequently found in the mouth. The anesthetized area, therefore, should be adequate to overcome these hazards of needless pain, too restricted activity, and nerve extension. Tissues should be anesthetized at least 1 cm. beyond the extreme limit of the area to be operated on (Fig. 7).

The single needle technique eliminates the need of changing from one sized needle to another and thus makes extension of the anesthetic area easier, especially if it happens that both deep and shallow injections are necessary to anesthetize a given area sufficiently.

Injection Zones and Anesthetic Bands

For the sake of simplicity, then, we will say that there are only two injections: the shallow injection and the deep. The shallow injections (otherwise classified as lingual, buccinator, mucous fold, anterior, superior alveolar, incisive and infiltration) have one characteristic in common: the area of deposit of the solution lies less than one-fourth inch beneath the surface of the mucous membrane. Inasmuch as an anesthetic solution injected into the soft tissues theoretically spreads out radially from the point of injection, the average effective radius being about 5 mm., what might be called injection zones may be established.



Fig. 3—Method of supporting long needle when making shallow injection.

If a band (Fig. 2) is imagined lying along the buccal surface of the alveolar process of the mandible, one edge of the band corresponding to the gingival border, the other edge being the reflection of the mucous membrane, and if this band, approximately 1.5 cm. in width, is extended beyond the molars distally and upwardly just inside the ramus to a point just below the most anterior projection of the coronoid process, what might be called the mandibular injection band will be had, because all the effective shallow injections are made along the edges of this band. These edges might be called the injection zones, the upper one, the gin-

gival injection zone, and the lower, the apical injection zone.

Technique for Shallow Injections

In all injections into these zones the solution to be effective needs to be deposited only one-fourth inch or less beneath the surface of the mucous membrane. Similar anesthetic bands extend from and lie parallel to the other gingival borders with similar injection zones along their edges.

Injections into Gingival Zones—Injection into any of the gingival zones should be made in the base of the papillae between the teeth. In this area



Fig. 4—Position of needle in making shallow continuous injection at muco-buccal fold.

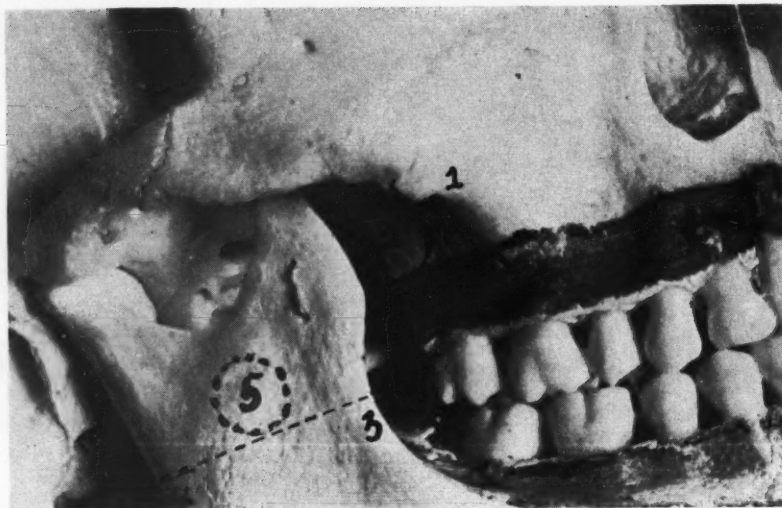


Fig. 5—Non-varying landmarks for the two deep injections: (1) base of zygoma or keyridge; (2) area of deposit over foramen of tuberosity; (3) to (4) line marking narrowest dimension of ramus; (5) area of deposit for mandibular nerve lies under this circle on lingual side of ramus.

the gum tissue is rather dense, whereas spongy bone lies beneath. Here pressure is normally used to force the solution through the foramina into the medullary bone between the teeth. In making this injection the forefinger of the left hand serves as a guide and support for the needle (Fig. 3).

At the extreme distal end of the mandibular gingival zone a shallow injection without pressure will anesthetize the lingual nerve.

Injections into Apical Zones—To deposit solution beneath the buccal apical zones the long needle is particularly

effective. The lip is grasped by the fingers of the left hand and pulled outward so that the muco-buccal juncture appears as a definite line angle. The needle is held parallel to the line of occlusion (Fig. 4), and, after insertion at the most mesial point on the area to be anesthetized, is pushed backward just under the surface of the mucosa, the solution being injected as the needle moves. The needle is inserted its full length, thus a large area may be anesthetized with only one insertion of the needle.

At the extreme distal ends of the

mandibular apical zone a shallow injection reaches the buccinator nerve.

Technique for Deep Injections

As has been said, there are only two areas requiring deep injections: one in the upper and one in the lower.

Lower Deep Injection—The purpose of the lower deep injection is to place solution around the trunk of the mandibular nerve before it enters the mandibular foramen. The point of injection lies on the anterior surface of the ramus exactly half way between the anterior and posterior borders on a line drawn across the narrowest dimension of the ramus. This narrowest part of the ramus may be determined by palpating between the thumb and forefinger:

a) The thumb is placed inside the mouth and pressed against the anterior border of the ramus.

b) The forefinger is placed behind the ramus on the outside of the face. This placement of the fingers gives the operator accurate knowledge of the ramus and the degree of outward flare.

c) With the fingers of the left hand still holding the ramus, the needle of the syringe is inserted into the soft tissue inside the ramus and directed so that it will strike bone just half way between the thumb and forefinger (Fig. 5).

d) Before the injection is made the retromolar triangle should be explored with the ball of the thumb to determine the width and flare of the internal oblique ridge as well as the location and texture of the anterior throat muscles. Both these structures vary greatly among people.

e) If the anterior throat muscles are soft and small, the needle may be passed through them, but if bulging, heavy muscles are found the needle must either be guided between the muscle and the bone or it must be inserted behind the muscle. The point of injection is not important so long as the point of the needle strikes bone exactly halfway between the anterior and posterior borders of the ramus on or above a line drawn across its narrowest dimensions.

Upper Deep Injection—In the upper deep injection the base of the zygomatic arch is used as a landmark. This injection is made with the mouth nearly closed which is an important point to remember.



Fig. 6—Mouth nearly closed and mandible extended laterally toward side to be injected. Pointer indicates notch in base of zygoma which is landmark for maxillary deep injection.

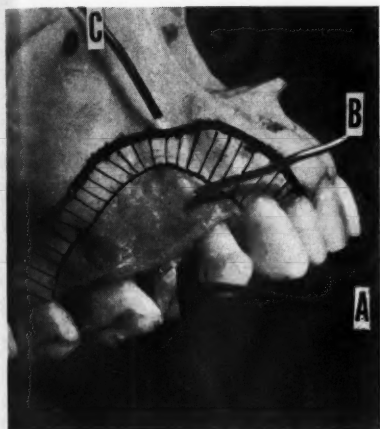


Fig. 7—Anesthesia area extended to make sure patient feels no pain from adjacent structures: a) tooth to be extracted; b) area of possible gum manipulation; c) extended margin of anesthesia.

a) The patient is instructed to swing the mandible as far as possible toward the side to be injected and to bring the teeth almost but not quite together (Fig. 6). This maneuver gets the coronoid process out of the way and relaxes the muscles of the cheek.

b) The forefinger of the left hand is inserted under the base of the zygoma and the soft tissues are palpated.

c) A spot will be felt at the tip of the finger that seems to offer no resistance. This is the base of the triangle formed by the temporal muscle and the bony wall of the maxilla. This soft membrane should be pierced by the needle which is then directed upward and backward along the surface of the bone for three-fourths of an inch. If the needle is in the proper place, no muscular resistance to its progress will be felt.

d) If any muscle tissue seems to impede its progress, the needle should be withdrawn and its direction changed.

The second and third molar and part of the first molar should be anesthetized with 1 cc. of solution.

Before any operative procedure is begun after injection, it is well to allow at least five minutes to elapse. Then the area should be carefully tested to make certain that the anesthetic has taken effect. If the area is not completely anesthetized, additional injections should be made, regardless of the amount of solution used which according to written instruction is supposed to produce anesthesia.

The Distribution of Orthodontists in the United States*

Thomas Sweet, D.D.S., Oakland, California

STATES AND CITIES	POPULATION	ORTHODONTISTS	POPULATION PER ORTHODONTIST
Alabama	2,832,961	4	708,240
Arizona	499,261	5	100,000
Arkansas	1,949,387	6	234,900
California	6,907,387	132	52,300
Los Angeles	1,496,792	40	37,400
San Francisco	629,553	23	27,370
East Bay	448,725	17	26,400
Sacramento	105,784	5	21,150
San Diego	202,038	4	50,500
Fresno	60,644	3	20,200
San Jose	68,298	4	17,700
Stockton	54,513	2	27,250
Santa Barbara	34,438	3	11,400
Pasadena	81,566	6	13,600
Long Beach	163,441	3	54,500
Santa Monica	52,828	4	13,200
Palo Alto	16,728	3	5,600
Colorado	1,123,296	16	70,260
Connecticut	1,709,242	14	122,000
Delaware	266,505	2	133,250
District of Columbia	663,091	13	50,100
Florida	1,897,414	14	135,500
Georgia	3,123,723	14	223,100
Idaho	527,783	1	527,783
Illinois	7,897,241	58	136,100
Chicago	3,384,556	28	120,800
Indiana	3,427,796	19	180,200
Iowa	2,538,268	18	141,000
Kansas	1,801,028	13	140,000
Kentucky	2,845,627	7	406,500
Louisiana	2,263,880	12	197,000
Maine	847,226	4	202,000
Maryland	1,821,244	14	130,000
Massachusetts	4,316,721	39	110,600
Boston	769,520	26	29,600
Michigan	5,256,106	50	105,000
Detroit	1,618,549	28	57,800
Minnesota	2,792,300	15	186,100
Mississippi	2,183,796	4	545,900
Missouri	3,784,664	36	105,100
Montana	559,456	3	186,300
Nebraska	1,315,834	7	188,000
Nevada	110,247	2	55,100
New Hampshire	491,524	2	245,750
New Jersey	4,160,168	38	114,700
New Mexico	531,818	3 not exclusive	
New York	13,479,142	126	106,900
New York City	7,380,259	73	101,100
North Carolina	3,571,623	13	274,700
North Dakota	641,935	2	320,900
Ohio	6,907,612	48	143,900
Oklahoma	2,336,434	9	260,000
Oregon	1,089,684	5	218,000
Portland	307,572	4	77,000
Pennsylvania	9,900,180	43	230,200
Philadelphia	1,935,086	17	113,200
Pittsburgh	665,384	15	44,350
Rhode Island	713,346	6	117,250
South Carolina	1,899,804	5	379,900
South Dakota	642,961	1 not exclusive	
Tennessee	2,915,841	11	265,000
Texas	6,414,824	43	149,100
Utah	550,310	2	250,150
Vermont	359,231	1 not exclusive	
Virginia	2,677,773	13	206,000
Washington	1,736,191	16	108,500
Seattle	366,847	10	36,680
Spokane	122,462	1	112,500
Tacoma	107,520	3	35,800
West Virginia	1,901,974	5	380,400
Wisconsin	3,137,587	13	241,300
Wyoming	250,742	1	250,000

*Condensed table taken from: The American Journal of Orthodontics and Oral Surgery (Orthodontics Section), 27:263 (May) 1941.

Deflasking Acrylic Dentures

C. FRANK TUMA, D.D.S., Cleveland

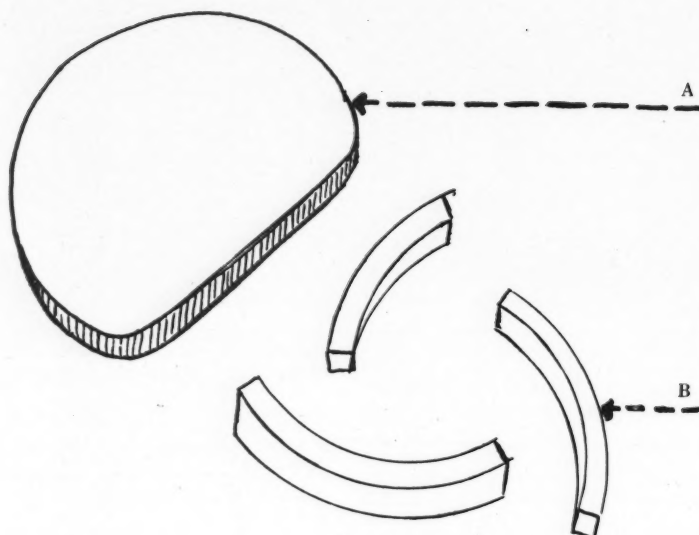


Fig. 1

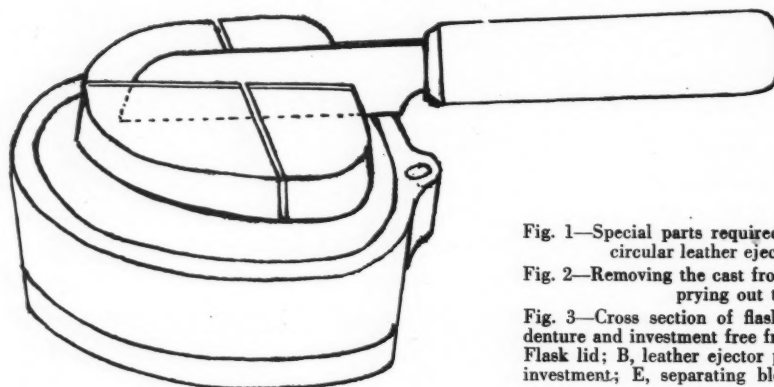


Fig. 2

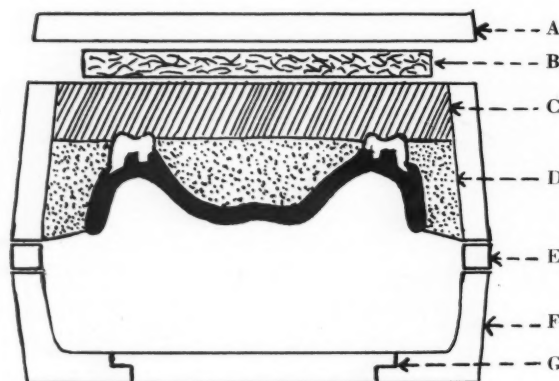


Fig. 3

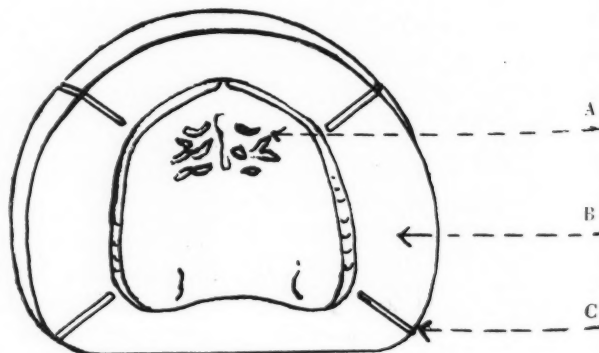


Fig. 4

DIGEST

A simple and safe technique is described for recovering the cured acrylic denture from the hard investment in the flask when boiling water instead of vulcanizing curing has been employed.

THE WIDE ACCEPTANCE of the boiling water technique for curing acrylic denture materials, in which the investing plaster does not disintegrate as it does in vulcanizer curing, has created a problem of recovering the cured denture from the flask. Various soft-setting plasters have been proposed to facilitate the deflasking process but none of these is acceptable because excessive distortion of the mold results. A simple routine is to be described here, therefore, which eliminates blind, tedious,

Fig. 1—Special parts required for ejecting the contents of the flask: A, semi-circular leather ejector pad; B, soft metal separator blocks.

Fig. 2—Removing the cast from the denture by quartering with a saw and then prying out the sections with a knife blade.

Fig. 3—Cross section of flask reassembled with ejector parts ready to press denture and investment free from flask by means of an ordinary bench press. A, Flask lid; B, leather ejector pad; C, stone occlusion retainer; D, hard plaster investment; E, separating block; F, lower flask half; G, removable bottom plate.

Fig. 4—Denture and investment after ejection from flask. Saw slots have been cut around the periphery to facilitate prying the plaster from the denture. A, Denture; B, surrounding hard plaster investment; C, saw slot.

and dangerous digging and prying while the denture is being recovered from the hard investment. Plaster and stone may be used.

Special Equipment

No expensive equipment is needed. A list follows:

1. *The Ejector Pad*—A nearly semi-circular piece of shoemaker's sole leather about 3 inches in diameter and one-fourth inch thick (Fig. 1) is used as the ejector pad. It should follow the outline of the flask and fit freely inside the flask.

2. *The Separator Blocks*—Two or three rods of soft metal, one-fourth inch square, about 2 inches long, bent to the curve of the periphery of the flask (Fig. 1) serve as the separator blocks. These should be of aluminum, copper, lead or any metal softer than the metal of which the flask is composed. This is to prevent damage to the accurately opposed flask edges. Hard wood or fiber may be substituted.

3. *Saw*—A plaster saw or an ordinary coping saw will be required.

Technique

1. After curing and cooling, pry apart the upper and lower halves of

the flask. A beveled edge at each heel of the flask facilitates insertion of the knife blade between the sections.

2. If the cast separates from the denture and remains in the lower half of the flask, remove it and empty the bottom section. Flasks with shallow lower sections and with removable bottom plates facilitate this step.

If the cast remains firmly attached to the denture because of undercuts, it must be removed by partition of the cast. Two saw cuts are made: one along the median line, and one at right angles to this cut (Fig. 2). Cut as deeply as is consistent with safety; then remove the quarters of the cast separately by inserting the knife blade deep in the saw cuts and prying. Remove the heel quarters first and the anterior quarters last.

If any portions of the cast still remain, they may be removed by using a small chisel, splitting off small bits from one-eighth to one-fourth inch wide. Light taps as for malleting a gold foil filling will insure control so that the chisel does not slip and gouge the tissue-bearing surface of the denture.

3. With the lower half of the flask empty, reassemble the flask after having first inserted the one-fourth inch

square separator blocks to maintain a separation between the flask halves. Remove the lid from the flask; place the semi-circular ejector pad over the plaster which has been thus uncovered, and replace the flask lid. The lid will be raised one-fourth inch (Fig. 3).

4. Replace this assemblage in the bench press and apply pressure to push out the contents of the upper half of the flask. Be sure the lid is properly aligned with the flask guides; otherwise the lid may be bent and damaged.

5. The plaster (or stone) investment may be easily removed from around the denture by cutting saw slots from the periphery toward the denture in four places: near each cuspid area and at each heel. Cut as deeply as is safe; then pry off the sections with a twisting motion of a knife blade. In the case of a lower denture, the lingual portion is safely removed by first cutting loose the bulk of plaster with one U-shaped cut. The remainder will break away with the finger pressure (Fig. 4).

6. The denture will now have been recovered from the flask and may be finished in the usual manner.

13201 Miles Avenue.

COMING IN SEPTEMBER:

Removal of Brown Stain from Fluorine Mottled Teeth

By Howard R. Raper, D.D.S. and J. G. Manser, D.D.S.

"Jenner discovered vaccination by having the wit to accept a tip from a dairymaid who told him that she could not have smallpox because she had had cow pox." Doctors Raper and Manser have emulated the wit of Jenner in their willingness to learn from women who risked with imaginative courage the application of the method for removing the "ring" from the bathtub to fluorine stained teeth.

Their narrative and early report represent more than a hopeful portent in the treatment of fluorine disfigurement.

Amalgam: Rapid Rubber Cup Finish

MORRIS EIGEN, D.D.S., ARLINGTON, VIRGINIA

Rubber Cup for Marginal Continuity

THE USUAL PROCEDURE in the finish of amalgam margins is to remove surplus by the more or less tedious use of metal instruments, stones, and disks. Marginal surplus is often left intact. Between structural changes of setting amalgam and the effect of masticatory stress, this brittle marginal surplus is broken off. This leaves behind the rough ledge for food impactions and recurrent caries.

Another type of marginal irregularity may be seen in fairly bulky restorations. These must be carved with extreme care; otherwise, part of the amalgam will break off. This type of fracture of a restoration has been seen to occur when the cohesive stability of the amalgam has not established itself sufficiently to overcome the force applied through the metal carver. In this type of broken continuity in which a crevice has developed, effective toothbrushing is impossible.

To prevent the foregoing types of marginal irregularity, for the last two years I have been using a soft rubber polishing cup about seven minutes after insertion, to finish amalgam margins.

Half of the rubber cup is kept on solid tooth structure and half on the over-full amalgam. Low speed rotation is maintained with light pressure until a smooth continuity is established between tooth and amalgam margins. The continuity is automatically established by two factors: the resiliency of the rubber cup and the obviously greater abrasion resistance of the tooth structure.

The rubber cup technique is effective over a greater area than the metal carver method, and requires only the effort of holding the cup in position with slight pressure.

Use of Rubber Cup in Establishing Anatomic Contour

Metal instrumentation in gingival or

DIGEST

A method of finishing amalgam margins by use of a soft rubber polishing cup instead of a metal carver is described. The suggested technique for establishing anatomic contour is intended to insure perfect continuity in order to prevent food traps.

subgingival cavities is not only tedious but often produces a laceration of the delicate and highly vascular gingiva. The rubber cup, because of its resilience, will not lacerate, is simpler, and perhaps more effective.

Because of the nature of the cup it is a comparatively simple matter to restore the protective enamel convexity at the gingiva. Were the class 5 cavity to be restored flat, as is often the case when metal carvers are used, food would be too greatly embedded into the

gingival crevice. The cup makes it easy to prevent that error.

When a bucco-gingival cavity extends somewhat proximally, the resilience of the soft rubber cup will adapt itself so well to the varying contour of the tooth that the entire finish can be accomplished without removing the cup from the tooth more than once.

Buccal and lingual carious finger extensions often terminate short of the opposite contact point. Because of the shallow nature of this type of cavity, efforts at removal of surplus by means of metal carvers are unusually tedious and often fruitless, when attempted shortly after insertion. This probably occurs because the amalgam has not set sufficiently to overcome the drag of the metal carver over the convex surface of a shallow restoration.

The soft rubber polishing cup proves more effective and simpler, because the thin amalgam restoration is held in place by the direct pressure of the cup at the same time that the rotation levels off the surplus. This general mechanism operates in the rubber cup finish of almost any amalgam restoration.

In the rubber cup technique the

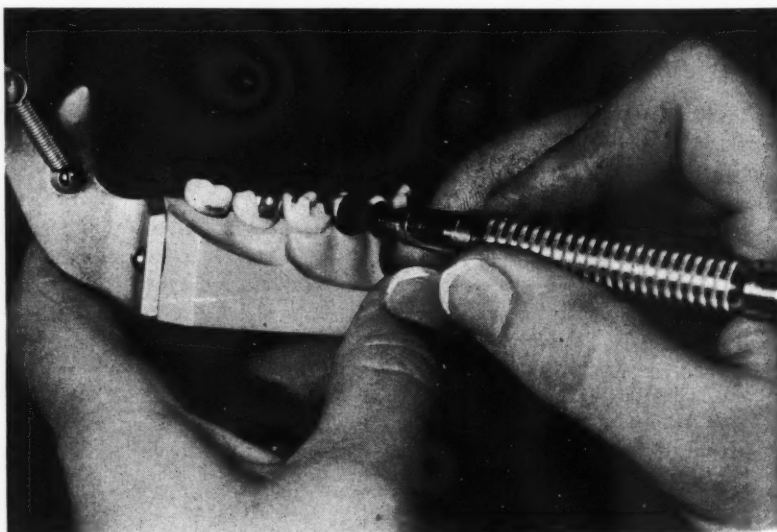


Fig. 1—Resilient rubber cup leveling off surplus subgingivally.

marginal continuity and contour are obtained at the same sitting; at a subsequent sitting the lustrous polish may be applied. When a perfect continuity is established at the same sitting by means of the soft rubber polishing cup, needless waste of sound enamel cannot occur. Inasmuch as all surplus in the contour and at the margins is removed while the amalgam is still in a semi-plastic state, abrasive disks, stones, and burs are not necessary at the following sitting.

Technique

1. Isolate and keep the field of operation dry with cotton rolls and a saliva ejector.

2. Remove caries and weak enamel rods. Provide for sufficient bulk and extend margins to areas immune to caries.

3. Sterilize with 90 per cent phenol and follow with 70 per cent pure grain alcohol.

4. Triturate the silver alloy with mercury according to the manufacturer's directions.

5. With an amalgam gun, carry a fairly soft mix into the cavity recesses. Continue by adapting and condensing progressively harder mixes until slightly over-full.

6. After approximately seven minutes, when the amalgam has begun to set and harden, apply a soft rubber polishing cup.

7. The motor is rotated at lowest speed in order to prevent the generation of heat which might adversely affect the amalgam or underlying pulp.

8. Keeping half of the rubber cup on solid tooth structure and half on the excessive restorative material, maintain low speed rotation with light pressure until a smooth continuity is established between the tooth and the amalgam margins. The resiliency of the soft rubber polishing cup together with its support on solid tooth structure will insure restoration of the anatomic contour of the tooth.

9. If the amalgam has been condensed sufficiently and is hard enough, pumice may be used in the rubber cup to hasten the removal of bulky surplus.

10. With the amalgam surface smoothed, time should be available for a lustrous polish.

137 North Highland Street.

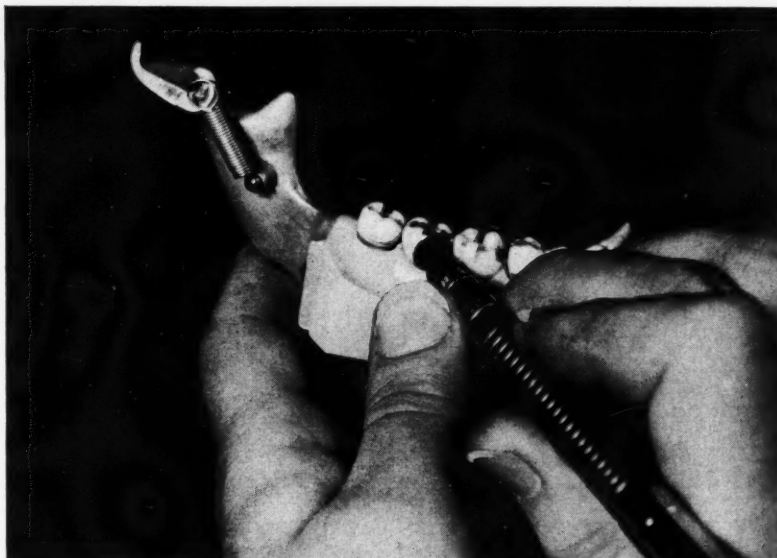


Fig. 2—Resilient rubber cup leveling off amalgam surplus at mesio-buccal aspect.

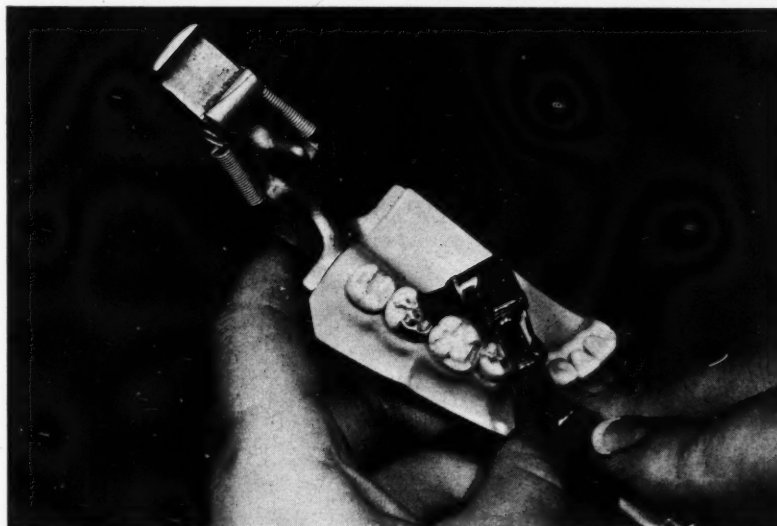


Fig. 3—Mesio-lingual amalgam convexity being established shortly after insertion by means of resilient rubber cup.

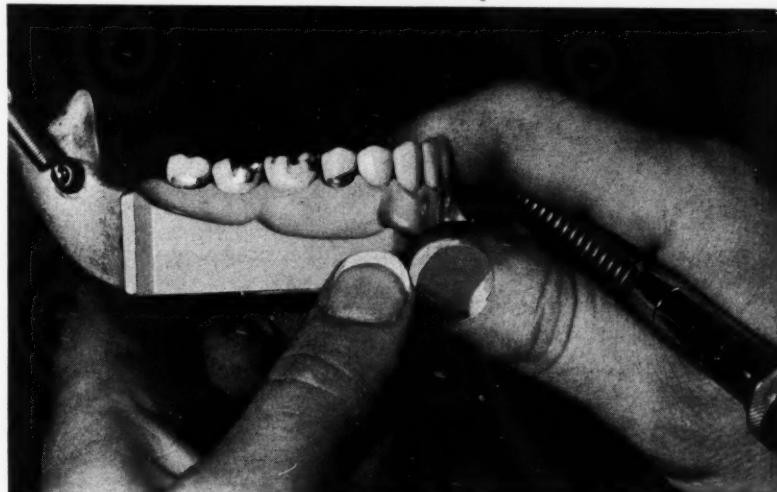


Fig. 4—Amalgam restorations as they appear shortly after insertion and following the rapid rubber cup finishing technique.

The Editor's Page

ORDINARILY THE *New York Times* is a conservative and conscientious newspaper and not one given to spectacular and flamboyant stories. A report, however, recently appeared in the *Times* concerning an address given in Atlantic City by an osteopath who deserted the spinal column to pontificate about other zones. This osteopath, with the agility and ease not accorded to the scientific investigator, was able to spring to a far-distant conclusion involving both orthodontia and ophthalmology. According to the *New York Times*, the osteopath asserted that "nearsightedness can be caused by corrective braces on the teeth." The account proceeds in this fashion: "In many instances the onset of myopia has been noted in relation to orthodontic work, and it is surprising to find how often glasses are needed a few months after the braces are put on. My case histories show that myopia begins most frequently between the ages of 8 and 12. This also is the period when most of the permanent teeth appear." The osteopath's explanation is typical of the elasticity concerning biologic facts frequently observed among his colleagues: "Pressure from the braces sometimes sets up reflex nerve impulses that may find their way to the eye muscles and be a major factor in myopia."

Ophthalmologists reacting to this startling theory point out that myopia is a condition in which the eyeball is too long antero-posteriorly and that vision has nothing to do with the muscles of the eye. Myopia frequently begins in the years from 10 to 14, whether or not orthodontic treatment is instituted at that time, and generally increases until the end of the growth period when the progressive nearsightedness usually stops. In other words, children who never see an orthodontist are likely to develop myopia between 10 and 14 years of age, and the human family probably suffered from myopia long before the specialist or the orthodontist made his appearance. The

unsubstantiated reasoning that permits a theory of causation to be deduced from the concurring developments of myopia and the need for orthodontic treatment in the same age epoch is about as sound as to see a relationship between orthodontic intervention and the phenomenon of puberty.

A story of this nature, appearing in one of America's foremost newspapers, may be harmful in the extreme. It is easy to conceive of a case in which a child urgently in need of correction for malocclusion is kept away from the orthodontist because an anxious and misinformed parent has been led to believe that there is a choice between a dental malformation and the possible optical disturbance which may be produced, according to the osteopath, by orthodontic treatment.

It is altogether likely that orthodontists will experience repercussions from this article. They may become the butt of misunderstanding when children under their care develop the myopia incident to their age. Parents may insist that the condition was brought on or activated by the orthodontic appliances. It is even possible that from this ill-considered sensationalism, some orthodontist may find himself the defendant in a suit at law.

Both the American Medical Association and the American Dental Association have tried diligently to see that health reports in general publications are scientifically accurate and are not splashed with the spectacular. The American Association of Orthodontists has done a fine job in public relations and public education. A great deal of the advance made can be nullified by one such news item as this in the *New York Times*. Newspapers and magazines in dealing with matters of health interest owe it to the population of the country not to disseminate misleading information, not to create false hopes, false promises, or false fears among their readers.

Comparison of Surgical Flap Operation and Gingivectomy in Periodontal Diseases*

LIEUTENANT (j. g.) J. L. BRADLEY, DENTAL CORPS, U. S. NAVY, PEARL HARBOR, HAWAII

BECAUSE THERE ARE so many varied methods used in the treatment of periodontal diseases this article will discuss without claim of originality the two more radical techniques of treating the soft tissue side of the pocket.

Lundquist¹ describes a chronic suppurative pericementitis "as consisting of a cementum of the tooth root in whatever state of health it may be, on the one hand, and on the other, as a more or less intact epithelial cover of the detached soft tissues. These soft tissues show evidence of round cell infiltration of inflammatory elements, often in abundance. Add to this the epithelial drift on the surface of the root in advance of the developing pocket, plus the resorption of the investing base in the area of infiltrated tissue, and we have some concept of the condition of the investing tissues that are to be treated." Kronfeld² stated that "any treatment does not eradicate the condition nor affect a permanent cure, but it does help to maintain the teeth in a useful state of function and health, and to prolong their span of usefulness. The patient should be given the understanding clearly that, in taking charge of him, the dentist cannot work a miracle and undo all the harm that has been done, or can he promise to arrest the pathological process affecting teeth and jaw. Frequent check-up by the patient [is essential], to hold, if possible, the line of attachment of the soft tissue to the surface of the tooth."

After a complete oral examination has been made and a definite diagnosis of periodontal pockets has been established, roentgenograms should be taken, and the measurements of the depths

DIGEST

A comparative discussion is presented between the two more radical of the many techniques of treating the soft tissue side of the pocket; namely, the surgical flap operation and gingivectomy. The parallel techniques are set forth in the accompanying two full-page illustrations.

of pockets should be recorded. Roentgenograms do not reveal pockets but merely show the amount of bone present on the mesial and distal surfaces. A thorough prophylaxis must be given. If conservative treatments, such as deep scaling, packing with astringents, and home oral hygiene do not eliminate the pocket, the more radical sur-

gical or electro-surgical techniques should be utilized.

Comments

If the patient has been well educated concerning the importance of full cooperation in home care of the mouth, approximately the same results will be accomplished by the surgical flap technique or gingivectomy. The surgical flap operation does not resorb down to a zero crevice as fast as the complete eradication of the tissue side of the pocket by means of a gingivectomy.

A repeated interproximal massage will transform the interdental papillae to new knife-edge healthy contours. As a result, after the inflammation has subsided the teeth usually become tight and comfortable on mastication.

Roentgenograms may reveal an increase in density of bone after the inflammatory reaction subsides. The investing tissues resume their normal condition on a basis of a dense supporting structure.

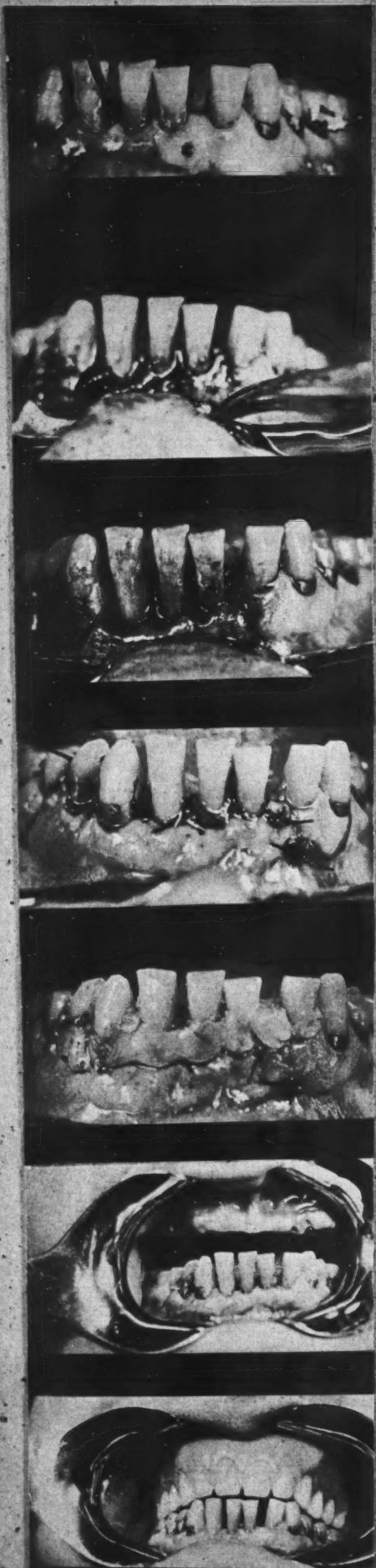
U. S. Navy Yard, Pearl Harbor, Hawaii.

See following two pages
• for Illustrations and
Techniques

*The opinions or assertions contained in this article are the private opinions or assertions of the author, and are not to be construed as official or reflecting the views of the Navy Department or the Naval Service at large. Article 113, U. S. Navy Regulations.

¹Lundquist, G. R.: Pocket Elimination: Surgical Method, Graduate School Lecture, Northwestern University Dental School, Chicago.

²Kronfeld, Rudolf: Clinical Pathology of the Periodontal Pocket, J. A. D. A. 27:499 (April) 1940.



The Surgical Flap Technique

1.

The instruments needed for the surgical flap technique are a few knives, either Merrifield's periodontal membrane knives or a sharp pointed scalpel, Black's special periodontal membrane explorers, a periosteotome, two small spoon-shaped curets, tissue shears, curved needles, needle carrier, sutures, and an Austin tissue retractor. The tissue to be operated on is anesthetized with 2 per cent procaine hydrochloride.

2.

The step-by-step technique is shown in the accompanying illustrations from Figs. 1 through 7. (Column at left, top to bottom).

Postoperative Treatment

3.

In the surgical flap operation the dressing should be left in place for four or five days. The area of operation should be cleansed and sprayed with warm salt solution. The sutures should be removed by the sixth day. As soon as possible the patient should start to brush and massage the teeth and by use of a rubber point (interproximal stimulation) or toothpick, the interproximal area should be stimulated to reduce congestion and increase tissue health and resistance.

4.

5.

TECHNIQUE FOR SURGICAL FLAP OPERATION

Fig. 1—A separation and division of the interdental gingival papillae is made by means of an incision through the crests, passing a sharp knife in either a mesial or distal direction.

6.

Fig. 2—The mucoperiosteal flaps are deflected, one lingually, and the other labially, thus exposing the inflammatory granulation tissue and the irregular normal bone surfaces. The inflammatory granulations are removed and rough irregular bone surfaces may be smoothed by means of small curets. This now leaves a smooth area and clean root surfaces.

Fig. 3—Appearance of teeth after the granulations have been removed.

Fig. 4—Flaps are placed back in position and with small tissue shears the irregular interdental papillae surfaces are removed, a smooth contact surface being left. The tissue is then sutured into place by means of sutures in each interdental papilla.

Fig. 5—After the operation, irrigate with warm normal salt solution. The teeth and gums are dried and a sterile wax dressing is placed over the tissue.

7.

Fig. 6—Appearance of area four weeks after operation.

Fig. 7—Patient wearing a denture three weeks after operation.

Gingivectomy

Gingivectomy is the method of removing the soft tissue side of the pocket down to the connective tissue attachment of the periodontal membrane.

The instruments needed are Merrifield's periodontal membrane knives; Black's periodontal membrane explorers; chisels, numbers 20-15 and 10 straight and biangle; enamel hatchets and spoons, numbers 15-8-12, and 10-6-12 right and left; cotton pliers; tissue shears; and normal salt solution. The tissue is anesthetized with a 2 per cent procaine hydrochloride solution.

The procedure is shown in the illustrations accompanying the gingivectomy technique. (Column at right).

Postoperative Treatment

In the gingivectomy the wax dressing should be left in place for at least 48 hours; then it is removed and the area is irrigated with normal salt solution. Hydrogen dioxide may be passed through the interproximal spaces, cleansing the root and soft tissue of any remaining blood or sloughing tissues. After the bone has been covered by normal granulation tissue and subsequently by epithelium, which usually takes ten or eleven days, the patient must be educated in the home care of the mouth. By the use of interdental stimulation and a thorough toothbrushing technique, the tissue should be kept in a state of healthful resistance.

TECHNIQUE FOR GINGIVECTOMY

Fig. 1—The depth of the pockets is marked on the labial surfaces of the soft tissues.

Fig. 2—The tissue is incised down to the mark that shows the depth of the pocket. The soft tissue is completely eradicated.

Fig. 3—Appearance of the area after the tissue has been removed down to the connective tissue attachment of the periodontal membrane.

Fig. 4—The inflammatory granulations are removed by means of spoon excavators, and the rough irregular surfaces of bone are smoothed by means of enamel hatchets.

Fig. 5—After irrigating with normal salt solution, the interproximal areas are packed with 8 per cent solution of zinc chloride for approximately five minutes. This astringent is used to remove the small excess granulations that are not eradicated and to aid in the establishment of good blood clot covering the alveolus.

Fig. 6—Small sponges used to pack the operative area with 8 per cent zinc chloride packs

Fig. 7—The gauze is removed, the area irrigated with warm salt solution, and then small strips of sterile bee's wax are placed in the interproximal spaces to serve as a dressing.

Fig. 8—Postoperative appearance.

1.

2.

3.

4.

5.

6.

7.

8.



Oral Infections*

Anatomic Arrangements of Floor of Mouth and Deeper Structures of Neck as Related to Spread of Oral Infections

FIG. 1: FLOOR OF MOUTH (Enclosed by firm mylohyoid muscular pouch) { AGAINST TONGUE
INFECTIONS IN POUCH MAY CAUSE SWELLING WHICH CANNOT EXPAND { OR EPIGLOTTIS;
EXCEPT { TOWARD THROAT
OR LARYNX

Muscular Pouch is stretched across and attached on sides to:

Mylohyoid Ridges: one-half inch *behind* and just *below gingival margins* of last lower molars.

Muscular Pouch then dips *downward* and *forward* to:

join sides of inner edges of chin about 1½ inches *below gingival margin in front*.

Sides of Pouch { meet in the midline;

{ are attached posteriorly by a strong fibrous band reaching to:

Hyoid Bone *where* only open space of the pouch exists.

This Space

is at the submaxillary fossa where the deep portions of the submaxillary glands lie and ducts come forward. This makes drainage difficult.

has above it, the tongue;

has behind it, the epiglottis.

Near the epiglottis is the { larynx
and
esophagus.

is hemmed in { on the floor, by firm muscles;
on the side and in front, by bony wall of mandible.

Posterior wall is { the base of the tongue
and
deep portion of submaxillary gland.

by the roof, by tongue and mucosa of mouth.

is limited; therefore infection is localized in definite space.

WHEN INFECTION IS CONFINED TO ONE SIDE, TONGUE IS FORCED { UPWARD;
BACKWARD;
TO OPPOSITE SIDE.

WHEN THERE IS INFECTION ON BOTH SIDES, TONGUE IS PUSHED { TOWARD PALATE
AND BACKWARD.

DEEP CERVICAL FASCIA

{ may be likened to a large tube around the neck

{ attached above: to base of skull

{ attached below: to clavicles and acromion.

{ Within so-called large tube are: a series of smaller tubes.

Smaller Tubes: are attached to each other to envelop { muscles
viscera
{ carotid artery with { jugular vein
and
vagus } in tube called Carotid Sheath

Carotid Sheath: { Carotid sheath; has along side it: deep cervical lymph glands;
extends above into skull;
extends below into chest;
is considered the *main highway*.

→ All other tubes and spaces formed by

Splits of the { submaxillary
FASCIA { pharyngo-maxillary
retropharyngeal
periesophageal spaces

→ LEAD DIRECTLY OR INDIRECTLY INTO CAROTID SHEATH, the *main highway*.

ANY SPILLOVER FROM { THE FLOOR OF THE MOUTH
THE MAXILLARY FOSSA
PHARYNGO-MAXILLARY FOSSA } CAN BE REACHED BY WAY OF:
OR
LYMPH CHANNELS } MAIN HIGHWAY, CAROTID SHEATH

INFECTION { MAY HAVE BECOME LOCALIZED ALONG CAROTID SHEATH
OR HAVE TRAVELED UPWARD TOWARD THE SKULL
OR HAVE TRAVELED DOWNWARD TOWARD THE MEDIASTINUM } RESULT FATAL
OR INFECTION BECOMES
LOCALIZED THEREIN.

* Prepared by the Editorial Staff of THE DENTAL DIGEST with accompanying artwork done expressly and exclusively for this magazine by Angela Bartenbach.

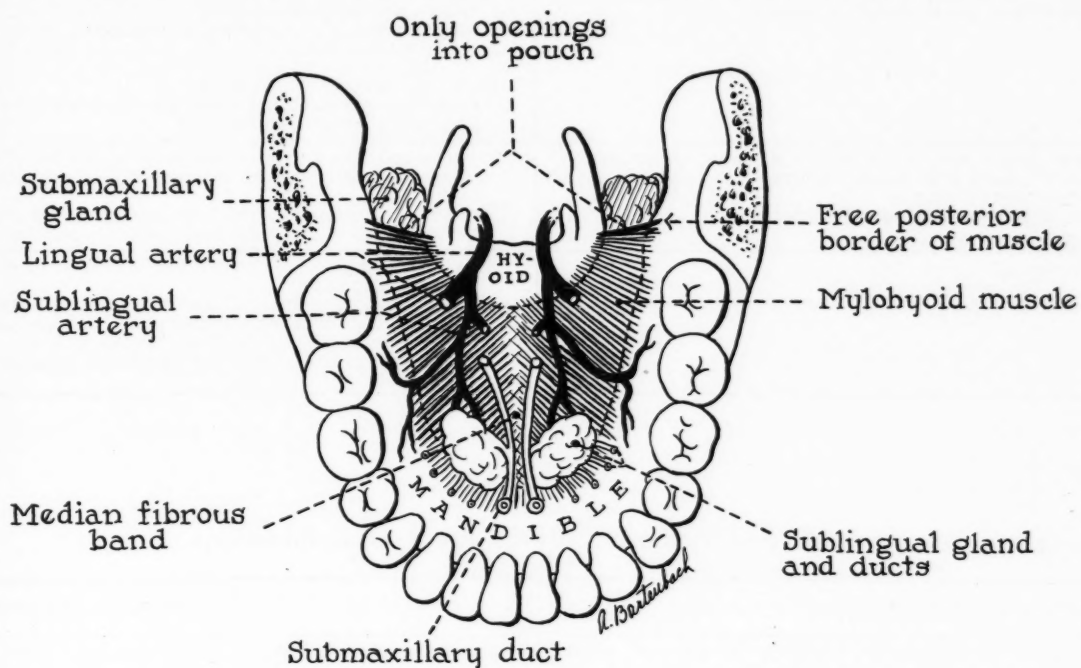


Fig. 1

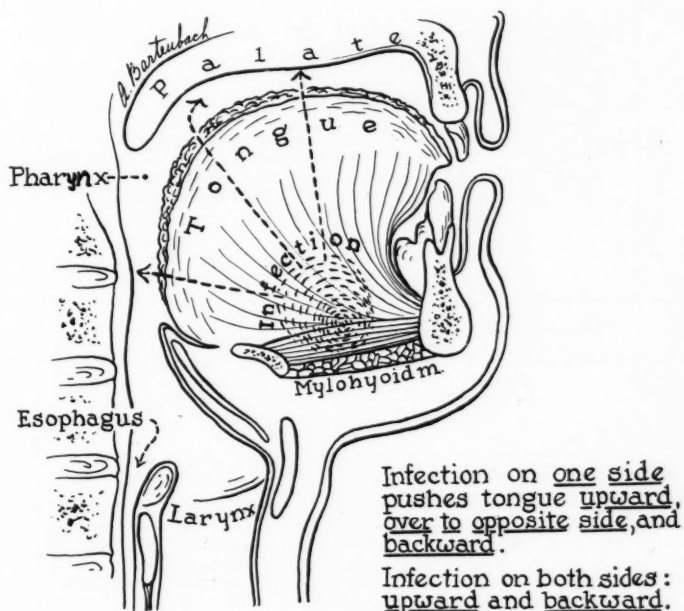


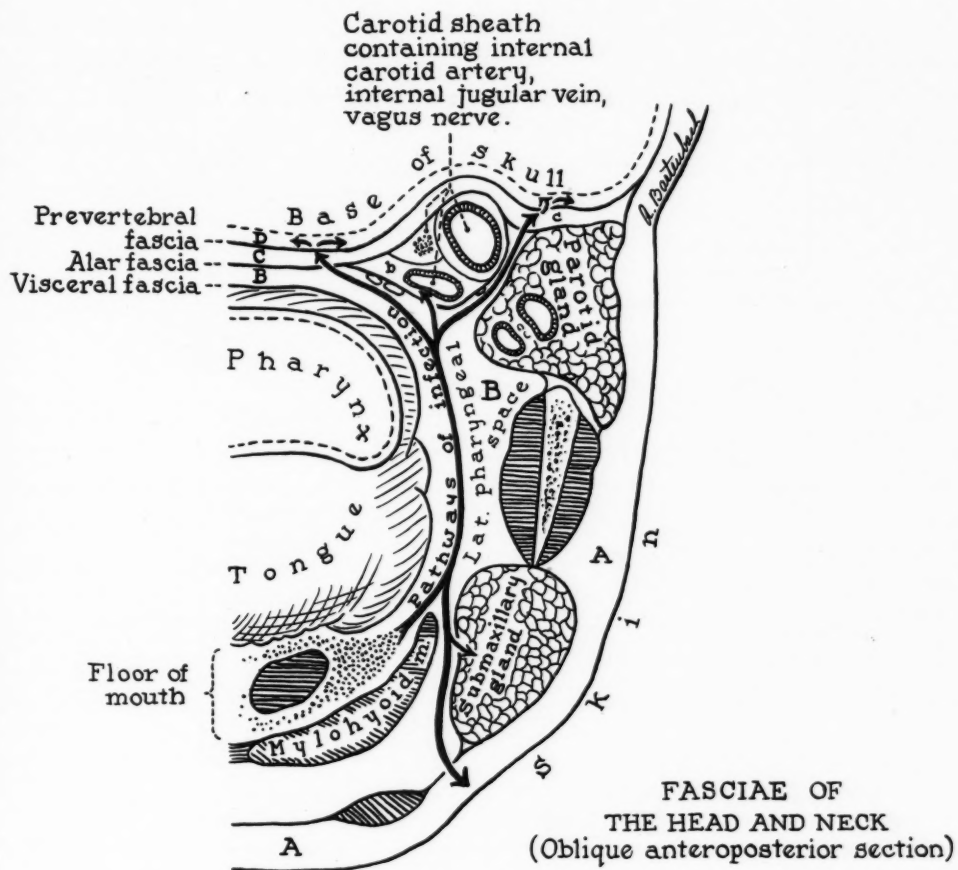
Fig. 2

Courses Pursued by Oral Infection as Indicated by Injections of Dye (Figs. 2, 3 and 4)

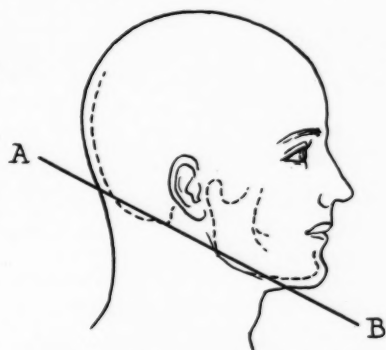
1. Infections arising around inner side of mandibular teeth and gums except anteriorly	<p>Enter tissues of sublingual pouch Where inflammation begins May develop into a sublingual phlegmon or Ludwig's angina OR Enter the deep cervical glands Involving submaxillary fossa, carotid sheath or Producing general septicemia.</p>
2. Infections inside the mouth near lower anteriors or in the gums and around the teeth on the external side or outside the midgingival border	<p>Produce infections outside the floor of the mouth; i.e., under the chin and in the superficial submaxillary region. Further extension may produce septicemia, depending on virulence of bacteria and patient's resistance.</p>
3. Infections	<p>Enter directly into neck instead of into floor of mouth: a) by contiguity; b) by way of submaxillary fossa, retropharyngeal fossa, then by the periesophageal and mediastinal regions and other cervical fascial planes; c) by way of the associated lymphatic chains.</p>

Severe and Acute Swellings From Oral Infections

Pathologic Condition	Site	Etiology	Maxillary Symptoms
Suppurative Periostitis	Begins at site of lesion; spreads downward and backward or forward, alongside of mandible; breaks through deeper structure of neck or floor of mouth; if in upper jaw, into face or sinus.	Lesion from mucosal, submucosal or bone involvement caused by Vincent's infection, ulcers, dentoalveolar abscess, infection in pocket covering unerupted lower third molar, trauma from foreign body or dental manipulation.	Acute swelling; pain; tenderness with or without abscess; necrosis of bone or osteomyelitis; maxillary sinus may be involved with or without swelling.
Sepsis	Begins locally as soft tissue cellulitis; carried to contiguous or even distant structures by venous or lymph channels—causing sepsis.	From soft tissue cellulitis	
	Extension into floor of mouth or deeper structures of neck	Lower gingival borders around teeth and within floor of mouth	
Mandibular Symptoms	Serious Complications	Appearance	Diagnostic Aids
Swelling from local abscess or osteomyelitis; elevation of temperature; pain; redness; tenderness; roentgenologic signs; sometimes localized to particular region of lymphatic gland.			Roentgenograms (RULE OUT MALIGNANCY)
	Swelling of tongue and throat; epiglottitis and larynx; Edema; spasm Difficulty in breathing and swallowing; Trismus of jaws from inflammation Ludwig's angina Fatal results at times	One-sided infection: tongue is forced upward and backward to opposite side. Both sides infected: tongue is pushed toward palate and backward. Boardlike swelling of tongue; externally, swelling under chin	



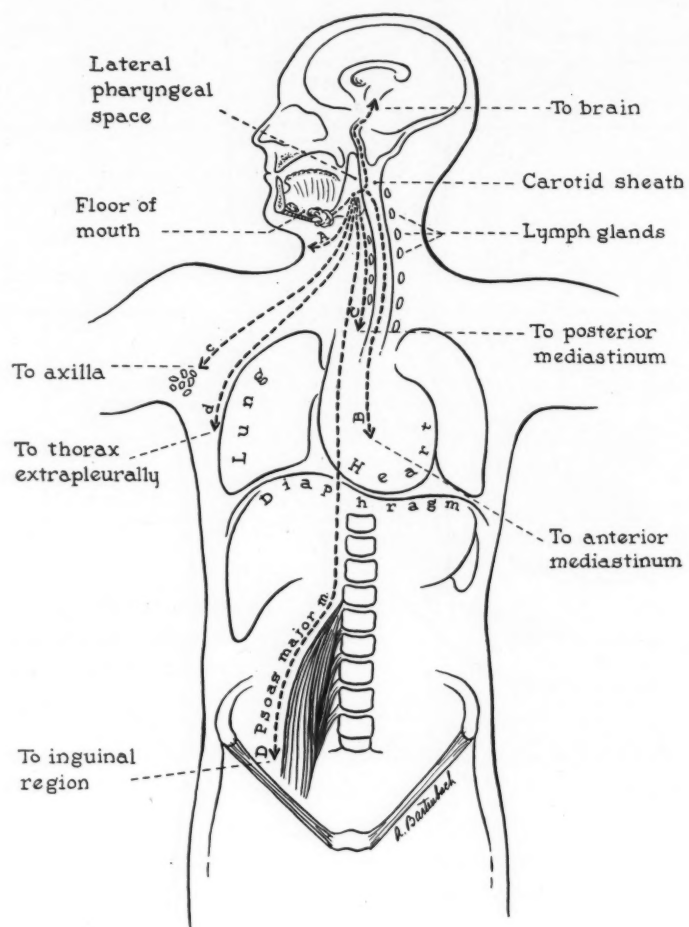
A, B, C, D, = fascial spaces.



Line AB shows level of oblique anteroposterior section.

Fig. 3

COURSE PURSUED BY ORAL INFECTIONS



A,B,C,c,D,d, refer to fascial spaces.

Fig. 4

Swellings of the Face, Jaw, and Neck in Oral Diagnosis*

Pathologic Conditions	Types	Diagnostic Aids	Clinical Appearance
Benign Growths	Mucous cysts Adenomas Lymphangiomas	History Individual Appearances Aspiration Roentgenographic Examination	
Odontogenic Tumors (embryonic dental remnants or epithelial debris of Me- lassez)	Depend on type of cell from which originated Depend on degree of differentiation Haven's Classification: 1. cystic odontomas A. follicular or dentigerous B. Adamantinomas 2. inflammatory origin or radicular cysts 3. traumatic 4. nondental embryonic rests A. median anterior palatine canal cysts B. facial cleft cysts	Roentgenograms	
Malignant Swellings	Epithelioma Osteosarcoma Sarcoma	Roentgenograms Biopsy	Inner side of upper or lower jaws Hard, firm and adherent Non-inflammatory
Metastasis	From Cancer or Sarcoma of tongue, palate, mouth, cheeks, nasopharynx, or throat	Roentgenograms Biopsy THOROUGH SEARCH URGED	Hard, firm, non-tender No suppuration unless secondarily infected Involving unilateral deep cervical gland
Secondary Involvements from syphilis and tuberculosis of the oral cavity	Chain of cervical glands		Enlarged but small Non-inflammatory
Enlarged Glands from Vincent's infection	Vincent's infection of teeth, tonsil, throat	Buccal smears Rule out mixed infections	Tender swellings at angle of jaw
Instrumental Trauma	Hematoma Edematous reaction Procaine reaction Fracture	History Roentgenograms	
Bone Necrosis	Chemical poisoning with phosphorus, mercury, etc.	History	
Calculi of Salivary Glands		Probing of duct Roentgenograms with or without lipiodol injection DISTINGUISH BETWEEN SUBLINGUAL OR SUBMAXILLARY INFECTED TENDER GLANDS	Not acutely inflamed Not tender unless infected If infected, pus exudes from ducts

*Swellings and Edema from causes other than Oral Infections are not considered in this Outline.

Sources:

Knopf, Saul: Swellings of the Face, Jaw, and Neck in Oral Diagnosis, Am. J. Ortho. & Oral Surg., Oral Surg. Section, 27:208 (April) 1941. Blair, V. P. and Ivy, R. H.: Essentials of Oral Surgery, Second Edition, St. Louis, The C. V. Mosby Company, 1936. Gray, H.: The Anatomy of the Human Body, ed. 23, Philadelphia, Lea & Febiger, 1936, page 289. Lederer, F. L. and Fishman, L. Z.: Phlegmons, Including Fascial Sheath Infections, of the Face and Neck of Dental Origin, 27:1439 (September) 1940. Spencer and Cade: Diseases of the Tongue, Philadelphia, Blakiston's Son & Co. Grodinsky, Manuel; and Holyoke, E. A.: The Fasciae and Facial Spaces of the Head, Neck and Adjacent Regions, Am. J. Anat. 63:367 (November) 1938.

Roentgenography of the Symphysis

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DIGEST

A simplified method for extra-oral roentgenography of the mandibular symphysis is described and illustrated, whereby (1) a small film may be used; (2) only two seconds' exposure time is required; (3) exposure is limited to the portion of interest; (4) definition of details is assured.

EXAMINATION OF BONE roentgenographically in cases of fracture is at the present undeniably the most dependable method of procedure, for diagnosis as well as during the course of treatment. In a fracture of the mandible in the region of the symphysis, before the intermaxillary wiring has been instituted, the intra-oral roentgenographic approach is perhaps the most accurate and simplest (Fig. 1). After the jaws have been wired together, however, because the anatomic location of the mandibular symphysis is such that a good view of it does not lend itself to a lateral technique, the only roentgenographic procedure now commonly used is the antero-posterior exposure. This method, involving the

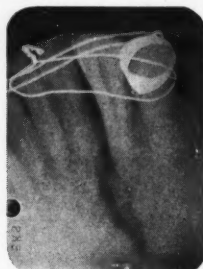


Fig. 1—Roentgenogram taken by intra-oral approach.

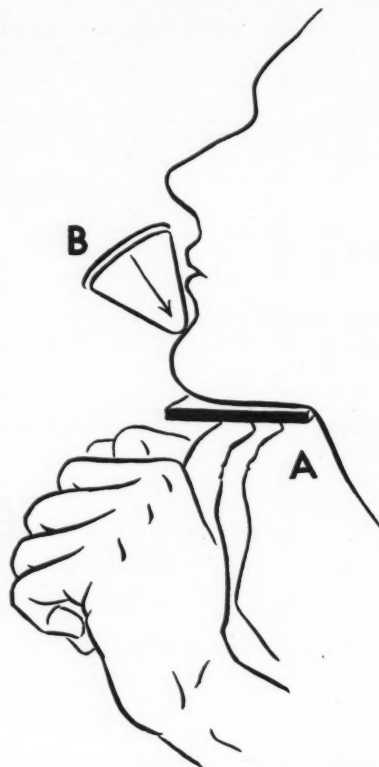


Fig. 2—A, Position of film; B, direction in which rays enter tissue.

penetration of the entire skull, necessitates a more or less complex technique, use of large x-ray plates, and prolonged exposures. In addition, because of the comparative remoteness of the part under inspection, the symphysis, from the path of the central ray, the results usually lack fine detail and definition.

A new method for extra-oral roentgenography of the mandibular symphysis has been devised whereby the shortcomings of the antero-posterior exposure are eliminated. This method obviates the need for exposure of the entire skull in order to view only one small portion of the mandible.

Technique

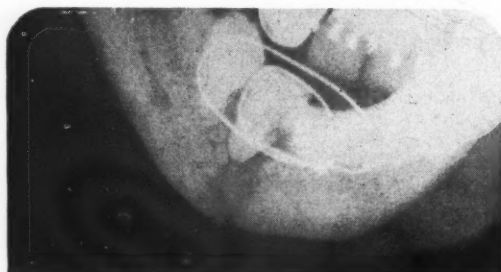
A small, 2¼ by 3 inch, super-speed film, usually employed for oral occlusal exposures, is used. Not more than two seconds' exposure is necessary. Fine detail and clear definition is always obtainable, and the technique is extremely simple.

1. The film with the emulsion upward is placed under the chin, where it is supported by the patient's thumbs (Fig. 2, A).

2. The anterior aspect of the x-ray tube cone is set as close to the chin as possible, and the point of incidence is set below the lower lip.

3. The center ray is directed in line with the fracture (Fig. 2, B). Examples of the resulting roentgenogram are shown in Figs. 3 and 4.

369 East 149th Street.



Figs. 3 and 4—Roentgenograms taken by the technique described in the text.



CANADA SPEAKS



Ottawa,
February 6, 1941.

To the Citizens of the United States:

I am pleased to extend to you an invitation on behalf of the people of Canada to visit our country in the course of the present year.

When you come to Canada, you will be able to cross the border without difficulty; you will need no passports; you will suffer no restrictions; you will be as free in our country as you are in your own.

You will meet with the warm friendship that good neighbours entertain for one another. Our country and our institutions are somewhat different from your own. But these variations will add interest to your visit.

You will find good roads on which to travel, fine gardens, lakes and rivers, mountains and meadows, and peaceful homesteads. You will also find great national parks preserved and dedicated for the health, refreshment, and entertainment of the people of Canada and their friends. We have splendid hotels, railway systems of which we are proud, and many pleasant places along our highways and byways where the visitor may rest.

For your money, you will receive the full premium. The American dollars which you leave behind will be used by the Government of Canada for purchases to be made in the United States. These purchases will be used for the defence of the ideals of freedom and justice which we hold in common.

The fact that we are at war will not occasion the slightest interference with your enjoyment and freedom.

W. L. Mackenzie King.

PRIME MINISTER OF CANADA.





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NOTES ON THE

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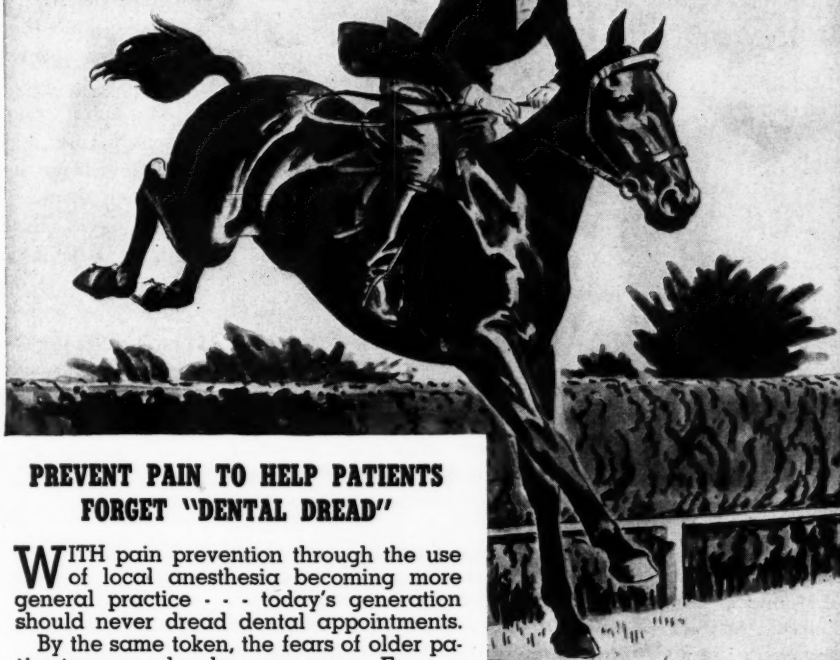
The Test of Time . . .

No professor of operative dentistry of my knowledge ever stood before his class or a dental group and publicly advocated the use of amalgam for restoration of anterior teeth, but some dentists seem to fly contrary to teachings of their professors and do use amalgam in lingual pits of anterior teeth and in those inaccessible distal cavities in upper cuspids. Nor have I ever heard a professor of prosthetic dentistry become wildly enthusiastic over the use of cantilever bridges. Recently I saw a patient who had received both "monstrosities"—amalgams in anterior teeth and a cantilever bridge. Despite the preachments of the professors, this dentistry had been in place for thirty-eight years. The anterior teeth were not discolored and, so far as I could see, no harm had come. The cantilever bridge, made on a gold shell crown, was firm and there was no evidence of periodontal pockets and the tooth was strong in its socket. Not much of the dentistry most of us place in the mouth will last thirty-eight years. Even the restorations that we carve and polish so carefully will not last that long.

What should the criteria of good dentistry be? Certainly we should include function. Will it work? We must also consider the health of the tissues—both that of the pulp and the investing tissues. Appearance is extremely essential. But the test that we are likely to forget is the test of time. In other words: Is the dentistry we are advocating or doing going to stand up? In the mind of the patient, "How long will it last?" is just as important as any other factor. Regardless of the skills used, of the beauty of the restoration, if the restoration "falls out" or fails in the eyes of the patient, the dentistry is no good and the dentist is incompetent. The public has no more scathing evaluation of a dentist than the dis-

FEARLESSLY Over the Highest Jump

**... but frightened crossing
her dentist's threshold !**



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I'll help you see more patients, too

"As a cabinet worthy of the American name, I do more than speak for you . . . I speed up your work so you can see more patients. My beauty and the way I conceal medicines and instruments promotes patient's composure and makes them more cooperative. I save your time because I'm organized according to a definite eight point efficiency program. My roller drawers and proper working height save your energy. And my silent operation reduces the nervous strain of both your patients and you. For full details of my efficient organization that helps you to see more patients, send in the coupon below."

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missory statement: "His fillings fall out."

Theory in Geriatrics . . .

I am no authority on geriatrics but I have noted that people past 65 who are edentulous appear to be in better physical condition than those who are functioning along on the remnants of their natural dentition. Perhaps the people who are wearing full dentures cannot flagellate their intestinal tract as much as people who have their own teeth. Perhaps, too, the minor irritations and infections involving the investing and supporting tissues of natural teeth take on a more serious aspect in older persons whose resistance is depressed.

The edentulous mouth is certainly a cleaner mouth, freer from bacteria, than the mouth with the natural dentition, particularly if that dentition is pretty well destroyed by the ravages of the ageing process.

No one would dare get up before a dental group and advocate full mouth extractions for everyone past 65, but it might not be a bad idea. This statement of mine is a neck-protruding one of the first degree and I expect to have a mail heavy with brick-bats in the immediate weeks to come.

Defensive Nutrition . . .

The excellent *Survey Graphic* carries the complete story of the National Nutritional Conference. The newspapers and radio are filled with stories on the importance of nutrition for defense. But with all the blowing of horns and humming of printing presses the public hasn't let a great deal of this story sink in: There are still too many people, women particularly, for whom breakfast consists of a cup of coffee and a cigaret, and some even get away from the coffee and substitute a popular carbonated drink. On the street corners are the white wagons and the beckoning bells of the ice cream and candy vendors. The lure to eat spongy sweet things is cast before us constantly.

How can we get the nutrition story across to the people? It seems we have tried "education" but education is a weak instrument in combat with the powerful and wealthy vested interests among food manufacturers. Should our diet be controlled by executive ukase?

Or, for our own good and for the good of the country, should we all be put on ration cards? I don't know the answer but apparently neither do the people in Washington who are so interested in nutrition for defense.

Telephone Etiquette . . .

I would be grateful to the telephone company for establishing a rule of etiquette. I have listened to and been part of duels between secretaries regarding who should be put on the wire first, the calling party or the one called. A major annoyance is to be called to the telephone and have to wait a long minute or two while some secretary pages somebody who is supposed to be calling. I would suggest to the telephone company that along with the "voice with a smile" campaign and the imperturbable operators, they give us a suggestion as to who should answer first, Alphonse or Gaston. My own idea is that whoever does the calling, even via a secretary, should be on hand to do the talking as soon as the person called is ready.

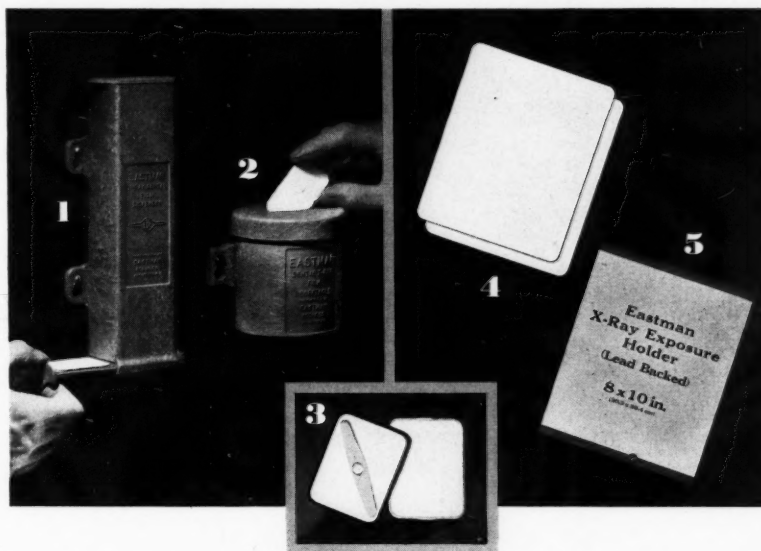
It has been observed many times but continued experience confirms the thought that the busier the man and the more important he is in the opinion of others rather than in his own estimation, the easier it is to reach him and have conversation with him.

Sincerity Compels . . .

In an out-of-the-way street there is a gasoline filling station. The lights around the station aren't particularly bright and the pumps aren't streamlined. But I find myself gravitating to this place in preference to others. The uniform the attendant wears is often wrinkled and his hands show his toil in grease. Lackeys do not rush out of hiding places to attack the windshield before the car is stopped. There is none of the fawning and saluting introduced by the "ultra" gasoline stations. There is none of the high-power selling attempted in formulas, such as "Shall I fill 'er up?"

I have been trying to satisfy myself about the reason for my going to this operator whose very name is unknown to me. The other day I found the clue. It is simply in the way the man bids his customer goodbye, the sincerity of his

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In your ORAL HYGIENE this month



"Doc's old and he ain't got much."

GUARD YOUR TONGUE!

by E. J. Burke, D.D.S.

In this human interest story, Doctor Burke shows what a thoughtless remark did to one dentist's career. It's in this month's **ORAL HYGIENE** . . . Also, in this issue Dr. Don C. Lyons discusses "Rearming for Dental Health in the Nation," to prevent the public being incapacitated by dental deficiencies . . . And Dr. Jacob L. Chivian warns his colleagues in "Racketeering as It Affects the Dentist" . . . Dr. E. C. Wetzel suggests that the Government "Spend Today to Save Tomorrow," advocating thorough dental examinations of selectees at time of induction . . . "That Dreamy Eyed Fellow," by Dr. Philip Weintraub, is a short story proving that "the proper handling of a patient is not an exact science but an acquired sixth sense" . . . And **ORAL HYGIENE's** seven popular departments . . . including Dr. W. Earle Craig's new "Technique of the Month," dealing, this time, with relining and reduplicating a full upper.

In your August ORAL HYGIENE

leave-taking. He says, "Thank you. Goodbye and good luck." The "good luck" stands out as a benediction. Such sincerity may well be applied by dentists.

None of the sly tricks of salesmanship, none of the "go-and-get-it" courses or courses in so-called dental economics can ever provide a substitute for sincerity in thinking and in manner.
—E. J. R.

DENTAL MEETING

Dates

Southern California Dental Society, annual meeting, Los Angeles, September 8-10.

Southern Society of Orthodontists, regular meeting, Raleigh, North Carolina, September 29-30.

Montreal Dental Club, seventeenth annual fall clinic, Mount Royal Hotel, Montreal, September 24-26.

American Academy for Plastics Research in Dentistry, the newly organized society for the purpose of coordinating the activities involved in the use of organic plastics in the dental profession, Assembly Room of the Houston Chamber of Commerce, Houston, October 26, at 2 o'clock. Application for admission may be made through the office of the secretary, LaMar W. Harris, 25 East Washington Street, Chicago.

American Public Health Association, regular meeting, Atlantic City, New Jersey, October 14-17.

American Dental Association, annual meeting, Rice Hotel, Houston, October 27-31.

American Dental Assistants' Association, seventeenth annual meeting, Texas State Hotel, Houston, October 27-31.

American Dental Hygienists' Association, eighteenth annual meeting, Lamar Hotel, Houston, October 27-31.